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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/970,444	10/03/2001	Eiji Hamamoto	04558/056001	9646

38834 7590 11/24/2004

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EXAMINER

CURTIS, CRAIG

ART UNIT PAPER NUMBER

2872

DATE MAILED: 11/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/970,444

Applicant(s)

HAMAMOTO ET AL.

Examiner

Craig Curtis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13-19 and 24 is/are allowed.
- 6) ☐ Claim(s) 1-12, 20, and 25-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

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DETAILED ACTION

Disposition of the Instant Application

- This Office Action is responsive to Applicants' Amendment filed on 27 August 2004, which has been made of record in the file.
- By this amendment, Applicants have newly added claims 25-32.
- Claims 1-32 are presently pending in the instant application.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. **Claims 1-11 and 20-32 are rejected under 35 U.S.C. § 112, first paragraph**, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Specifically, the polarizing plate limitations presently recited in these claims lack positive and specific structural limitations, which has the effect of rendering these claims subject to undue breadth rejection. *See* MPEP § 2164.08 (a) & *Hyatt*, 708 F.2d 712, 714-715, 218 USPQ 195, 197 (Fed. Cir. 1983).

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Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-5 and 20-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Tanaka et al. (5,071,906).

With regard to claims 1, 2, and 20-28, the polarizing film (*read*: polarizing plate) taught by **Tanaka et al.** implicitly exhibits, in the same manner as that exhibited by the polarizing plate disclosed by Applicants, each of the (single transmittance)/(crossed transmittance) limitations respectively recited in the above-identified claims. **Tanaka et al.** further teach wherein said polarizing plate (*alt.* polarizing film) is obtained by dyeing and stretching said film (see ABSTRACT), crosslinking resulting therefrom (*id.*), and wherein said film is a polyvinyl alcohol (PVA) film (*id.*).

With regard to claims 3-5, the polarizing film (*read*: polarizing plate) taught by **Tanaka et al.** implicitly exhibits, in the same manner as that exhibited by the polarizing plate disclosed by Applicants, each of the following respectively recited limitations: wherein said luminous corrected transmittance Y of at least 42.5% when the standard illuminant is a C light source having luminous factor correction per 10 nm in a range from 700 nm to 400 nm (*read*: from 400 nm to 700 nm); wherein said transmittance Y is at least 43.0 % but not more than 44.0 %; and wherein said polarization degree is at least 99.98 %. *See entire document* (e.g., col. 7, ll. 53-67--col. 8, ll. 1-14).

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 6, 7, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka et al. (5,071,906).

With regard to claim 6, Tanaka et al. disclose the claimed invention as set forth above with regard to claim 1. Tanaka et al. further provide teachings of the following respectively recited limitations: wherein said polarizing plate is produced from a polyvinyl alcohol (PVA) film (see, e.g., Abstract) in a series of steps of: dyeing said PVA film in a dye bath containing a dye selected from the group consisting of dichroic iodine and dichroic dyestuff (see, e.g., col. 1, ll. 45-53; also see col. 4, ll. 55-60 & col. 5, ll. 1-24), and crosslinking with a crosslinking agent (col. 5, ll. 19-24: namely, boric acid) while stretching the PVA film, said stretch ratio being 1-4 (col. 4, ll. 58-60) or higher (see, e.g., col. 9, ll. 19-23) -- **EXCEPT FOR** an explicit teaching wherein said crosslinking is accomplished in respective crosslinking steps. As Tanaka et al., however, do in fact provide explicit teachings of several different examples of crosslinking baths--albeit each of said examples being performed independently of one another--the Examiner contends that it would have been obvious to one having ordinary skill in the art at the time the invention was made to have respectively subjected said polyvinyl alcohol (PVA) film to a second crosslinking bath, a stretch ratio in said second crosslinking

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bath being higher than the stretch ratio in said first bath (cf., e.g., Example 1 (col. 8, ll. 22-63; esp. l. 56) & Example 3 (col. 9, ll. 9-28; esp. ll. 19-23)), for at least the purpose of producing desired polarization characteristics in said polarization plate.

With regard to claim 7, Tanaka et al. disclose a total stretch ratio for said PVA film that ranges from 5 to 7. See, e.g., Example 1 (column 8, lines 22-63).

Finally with regard to claims 6, 7, and 29, it is noted that these claims are so-called *product-by-process* claims, and even though product-by-process claims are both limited by and defined by the recited process, **the determination of patentability is based on the product itself.** That is, the patentability of a product does not depend on its method of production. Indeed, if the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985) (citations omitted). ONCE A PRODUCT APPEARING TO BE SUBSTANTIALLY IDENTICAL IS FOUND AND A 35 U.S.C. 102 /103 REJECTION MADE, THE BURDEN SHIFTS TO THE APPLICANT TO SHOW AN UNOBVIOUS DIFFERENCE. "The Patent Office bears a lesser burden of proof in making out a case of prima facie obviousness for product-by-process claims because of their peculiar nature" than when a product is claimed in the conventional fashion. *In re Fessmann*, 489 F.2d 742, 744, 180 USPQ 324, 326 (CCPA 1974). Once the examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to Applicant to come forward with evidence establishing an

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unobvious difference between the claimed product and the prior art product. *In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir.1983). "[T]he lack of physical description in a product-by-process claim makes determination of the patentability of the claim more difficult, since in spite of the fact that the claim may recite only process limitations, it is the patentability of the product claimed and not of the recited process steps which must be established. We are therefore of the opinion that when the prior art discloses a product which reasonably appears to be either identical with or only slightly different than a product claimed in a product-by-process claim, a rejection based alternatively on either section 102 or section 103 of the statute is eminently fair and acceptable. As a practical matter, the Patent Office is not equipped to manufacture products by the myriad of processes put before it and then obtain prior art products and make physical comparisons therewith." *In re Brown*, 459 F.2d 531, 535, 173 USPQ 685, 688 (CCPA 1972).

4. Claims 8-11 and 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka et al. (5,071,906) in view of Shinohara (5,833,878).

Tanaka et al. disclose the claimed invention as set forth above with regard to claims 1 and 29 **EXCEPT FOR: with respect to claims 8-11**, explicit teachings wherein said polarizing plate according to claim 1 further comprises the following respectively recited limitations: either a reflecting plate or a semitransparent reflecting plate bonded to said polarizing plate; a retardation plate (λ plate) bonded to the polarizing plate; a viewing angle compensating film bonded to said polarizing plate; and a brightness-enhanced film bonded to said polarizing plate by means of either an

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adhesive or pressure-sensitive adhesive; **and with respect to claims 30-32**, wherein said at least one transparent protective film is adhered to at least one surface of the polarizing film.

Shinohara, however, provides explicit teachings of each of the above-recited limitations. *See annotations made in col. 20*. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the invention of **Tanaka et al.** such that its polarizing plate further comprise the above-recited elements, each of which being explicitly taught by Shinohara, for at least the purpose of achieving a desired functionality vis-à-vis said polarizing plate.

5. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shinohara (5,833,878) in view of Tanaka et al. (5,071,906).

Shinohara discloses a liquid crystal display comprising a liquid crystal cell and a polarizing plate provided onto at least one surface of said liquid crystal cell (see Abstract, entire document) **EXCEPT FOR** an explicit teaching wherein said polarizing plate exhibit the characteristics recited in the limitations of this claim. **Tanaka et al.**, however, disclose, as set forth in detail above--in particular, see comments made above with regard to the polarization plate of claim 1—a polarizing plate having the (single transmittance)/(crossed transmittance) ratios recited in this claim. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the invention of **Shinohara** such that it comprise a polarization plate exhibiting the characteristics recited in the limitations of this claim, as taught by **Tanaka et al.**, for at least the purpose of optimizing the performance of said liquid crystal cell.

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Allowable Subject Matter

6. **Claims 13-19 and 24 are allowed.**

7. The following is an examiner's statement of reasons for allowance: The claims are allowable over the prior art for at least the reason that the prior art fails to teach or to reasonably suggest, **with regard to claims 13-19, [a] method of producing a polarizing plate, comprising (among others) the method step of crosslinking in at least two crosslinking baths containing a crosslinking agents while stretching the PVA film in the respective crosslinking steps, in which a stretch ratio in a first crosslinking bath is 1-4 and a stretch ratio in a second crosslinking bath is higher than the stretch ratio in the first bath; and with regard to claim 24, [a] method of producing a polarizing plate, comprising (among others) the method step of crosslinking in at least one crosslinking bath containing a crosslinking agent while stretching the PVA film in respective crosslinking steps in which a stretch ratio in a first crosslinking step is 1-4 and a stretch ratio in a second crosslinking step is higher than the stretch ratio in the first crosslinking step, as set forth in the claimed combination.**

8. Any comments considered necessary by Applicants must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Response to Arguments

9. Applicants' arguments filed on 27 August 2004 have been fully considered and have been found persuasive in part and non-persuasive in part. In those instances for which Applicants' arguments have been found persuasive, the relevant claims have been allowed.

In their arguments, Applicants traverse the rejection of claims 1-5, 8-11, and 20-23 under 35 U.S.C. 112, first paragraph, for lack of enablement. (In the instant Office Action, claims 1-11 & 20-32 are so rejected.) Applicants traverse on the grounds that "...*the optical properties recited in the present claims are not just results to be achieved but are 'positive and specific structural limitations' that properly define the presently claimed invention in the optical filed, more specifically, the field of polarizing elements.*" (Emphasis added.) The examiner respectfully disagrees for at least the reason that, notwithstanding Applicants' assertion to the contrary, no positive and specific structural limitations are presently recited in *any* of the above-recited claims. It is noted in particular that Applicants' recitation of the optical properties associated with the polarizing plate recited in these claims cannot reasonably be taken as setting out positive and specific structural limitations with respect to same. Indeed, the only structure set out in these claims is *[a] polarizing plate*. (Emphasis added.)

With regard to the prior art rejection of the claims, the absence of the recitation of any specific structural limitations in the claims subjects same to the prior art rejections set forth in detail hereinbefore. Applicants are respectfully requested to amend, where appropriate, the presently recited *A polarizing plate...* article claims such that they set out positive and specific structural

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limitations. Absent such recitation, the limitations of the specific optical properties of said polarizing plate by Applicants are allowable only in the context of method claims.

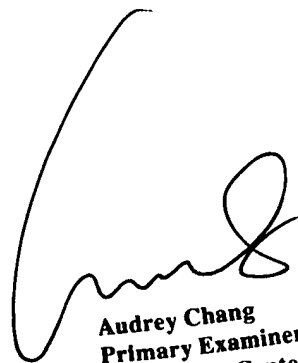
Contact Information

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig Curtis, whose telephone number is (571) 271-2311. The examiner can normally be reached on 9 AM to 6 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew A. Dunn, can be reached at (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

C.H.C.
Craig H. Curtis
Group Art Unit
20 November 2004



Audrey Chang
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